Message

From: Penny Mabie [pmabie@enviroissues.com]
Sent: 2/28/2013 8:31:37 PM
To: jan whitefoot Personal Privacy/ Ex. 6 Jim Dyjak Personal Privacy/ Ex. 6
CC: Andy Cervantes [Andres.Cervantes@DOH.WA.GOV]; Charlie McKinney [charlie.mckinney@ecy.wa.gov]; Dan DeGroot [dan@skyridgefarms.com]; Dr. Kefy Desta [kefyalew.desta@wsu.edu]; esanchey@yakama.com [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=Dc004cb3b2e645a7a035781fcb60afcc-esanchey@yakama.com]; Ginny Stern [Ginny.Stern@DOH.WA.GOV]; Gordon Kelly [gordon.kelly@co.yakima.wa.us]; Heather Wendt [Heather-wendt@conservewa.net]; Personal Privacy/ Ex. 6 Jaclyn Ford [JFord@agr.wa.gov]; James Beaver [commissioners@co.benton.wa.us]; Jason Sheehan Personal Privacy/ Ex. 6 ; Jean Mendoza Personal Privacy/ Ex. 6 ; Jim Newhouse [jnuhouse@gmail.com]; Jim Trull [JIM@svid.org]; John Van Wingerden [johnv@portofsunnyside.com]; Personal Privacy/ Ex. 6 ; Kirk Cook [KCook@agr.wa.gov]; Laurie Crowe [lc@sycd.us]; Lino Guerra Personal Privacy/ Ex. 6 ; lmfrans@usgs.gov [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=Ff3b6ee5dde14dc6929275da128f5fa6-lmfrans@usgs.gov]; Mark Nielson [Mark-nielson@conservewa.net]; Matt Bachmann [mbachman@usgs.gov]; Matt Ely [mely@usgs.gov]; Rand Elliott [Rand.Elliott@co.yakima.wa.us]; Rick Dawson [rickd@bfhd.wa.gov]; Rick Perez Personal Privacy/ Ex. 6 ; Robert Farrell [bob@portofsunnyside.com]; Steve George [sageconsulting@bossig.com]; Stuart Turner [agforensic@aol.com]; Eaton, Thomas [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=10fa13022096442d83a97a2b7a699f06-Eaton, Thomas]; Tom Ring [ringt@yakama.com]; Tom Tebb [thomas.tebb@ecy.wa.gov]; Troy Peters [troy_peters@wsu.edu]; Vern Redifer [vern.redifer@co.yakima.wa.us]; Ali Sedighi [ali.sedighi@co.yakima.wa.us]; Chelsea Durfey Personal Privacy/ Ex. 6 Daniel Brody [dbrody@enviroissues.com]; Donald Gatchalian [donald.gatchalian@co.yakima.wa.us]; Lisa H. Freund (lisa.freund@co.yakima.wa.us) [lisa.freund@co.yakima.wa.us]; Penny Mabie [pmabie@enviroissues.com]; Terry Keenhan [Terry.Keenhan@co.yakima.wa.us]
Subject: RE: Nitrates as Legacy Contaminants/false statement no such thing stop using phrase

Hello Jan and Jim,

I've been in touch with Charlie McKinney and Tom Tebb from the Washington Department of Ecology regarding your concerns with Bob Farrell's update to the Port of Sunnyside's commissioners.

Tom and I looked into the two concerns you expressed about the story in the Daily Sun News in which Bob Farrell was quoted: Issue 1) that Jim should not have been "speaking for the Groundwater Advisory Committee" and Issue 2) that the County or the State were looking into a UC Irvine study.

On Issue #1, you are correct in saying that the GWAC's operating guidelines appoint Rand Elliot, chair, as the only person to speak for the committee with the media. However, my read of this situation is that Bob Farrell was asked by the port commissioners, as their representative to the groundwater advisory committee, to brief them (not the media) on progress being made by the committee. I don't see how Bob could have avoided providing this briefing. It is unfortunate that it occurred in a public setting, but that is the way the Port Commission does its business, and therefore a representative from the media was there to cover the meeting. Bob did not seek out the media, nor was he interviewed by the media. So, he did not attempt to speak for the committee "in discussions with the media" which is what the Operating Guidelines address.

On Issue #2, Tom Tebb looked into the reference to the UC Irvine story printed in the newspaper. Bob actually mentioned the U.C. Davis study, "Addressing Nitrate in California's Drinking Water" which has been mentioned to the GWAC several times and is, in fact, on the GWMA website in the library section. http://www.yakimacounty.us/gwma/library.php. Apparently the reporter who was in attendance at the commissioners' meeting got the reference wrong. It would be up to either Bob or the Commissioners to notify the reporter with the correction, as they were the ones present at the meeting.

The issue of "legacy" nitrate contamination has not yet been fully discussed by the GWAC. It is apparent there is concern with the use of the term and the science behind the term. We have made adjustments to GWAC documents over just that point. The issue will need to be further addressed, but as it falls into the category of "sources", I think it should be addressed first by the technical sub-committees within the context of identifying and quantifying nitrate sources and then brought to the full committee for discussion in that context.

So, my conclusion is that Bob Farrell did not act in opposition to the GWAC's operating guidelines and neither the county or the state are pursuing studies outside of consultation with the GWAC. As the agenda items for the March meeting have already been agreed upon by the committee, unless I hear an overwhelming request to add this issue, it will not be on the next full committee agenda. I have cc'd the entire GWAC committee with this email, so that everyone is aware of the concerns you've stated.

I did not cc the other folks you included in your earlier correspondence to me – I generally confine my communications to the GWAC and staff. If you care to share this with the others you included, feel free to do so by forwarding. Thanks for sharing your concerns with me and the GWAC.

Best regards,
Penny

From: jan whitefoot [mailto:jafoot72@embarqmail.com]
Sent: Thursday, February 28, 2013 11:09 AM
To: Penny Mabie; Charlie McKinney (ECY); vern redifer; Rand Elliott; linda Dyjak; Helen Reddout; JEAN MENDOZA; hannigan, wendell; Jennings Marie
Cc: Andres Cervantes; Gordon Kelly; Tom Ring; Elizabeth Sanchey; Tom Tebb; Eaton Thomas; rick watlamet; David Reeploeg; JEAN MENDOZA
Subject: Nitrates as Legacy Contaminants/false statement no such thing stop using phrase
Importance: High

Penny,
As we, community members, have shown government and officials twice before, nitrates to not qualify as legacy contaminants. Industry, and their supporters have continued to use this phrase to shift the pollution blame on others. This is not a true statement and should be retracted from the Sunnyside Paper along with GWMA members informed on the error of the statement. Can this be put on the agenda for the next meeting? It was agreed upon by GWMA members, to let Rand do press releases to the newspaper that are factual; so let's hold people to the truth.
Below, is Dr. Dan Peplow's explanation on why nitrates can not be legacy pollutants. Let us again stop the false statements being supplied to the media.
Jan Whitefoot
Concerned Citizens of the Yakama Reservation

Hi Jan.

I wanted to respond in greater detail to your question regarding my thoughts and comments on nitrates as "legacy contaminants". Please share this with the soil scientist you said was upset with my comments. I would welcome the opportunity to meet and discuss this further if you think that would be helpful. I would also welcome the opportunity to learn more about the process and the kinetics of denitrification locally and gain from your staffs experience in this area.

First, you mentioned the term legacy nitrate contamination. It seems like it would be important to distinguish "legacy contaminants" from "a legacy of contamination". Legacy contaminants refers to problems experienced today that are 'legacies' of contamination from 'past' activities. For an example see the article "U.S. Food Still

Tainted with Old Chemicals "by By Emily Elert published in Environmental Health News April 22, 2010, which describes the "legacy" of chemicals that, although they have been banned for over thirty years, are still being found in our food supply.

A good working definition of "legacy contaminants" would be substances whose use has been banned or severely restricted by government agencies for many years. Legacy compounds typically have well developed regulatory guidelines for allowable concentrations in soils, sediment, water, and biota. Due to chemical stability and slow rate of decomposition, these pollutants persist in the environment for a long period of time after restrictions are put in place and their decrease is gradual.

The term, "Legacy Contaminants" is often used interchangeably with the term "Persistent bioaccumulative toxicants (PBTs)". The most common chemicals on the list of legacy contaminants are: Chlordane, Chlorinated Paraffins, DDT, Dieldrin, Dioxin, Endosulfan, Endrin, Heptachlor, Hexachlorobenzene, Lead, Mercury, PCBs, Polybrominated Diphenyl Ethers (PBDEs), and Toxaphene.

There are a lot of publications from California that refer to the legacy of nitrate contamination, which refers to ongoing contamination and inputs of nitrates that are occurring where urban developments are built and which is a legacy of the agricultural history of the area. Now, the question here is whether nitrate is actually a "persistent bioaccumulative toxicant" or "legacy contaminant". Or, is there some other reason why there are still high levels of nitrates, which are inherently non-persistent or non-bioaccumulative.

Nitrate, unlike mercury, lead or persistent organic pollutants is not stable and is vulnerable to decomposition due to denitrification. The process of denitrification in the soil is a mechanism that results in the significant loss of fertilizer and soil nitrogen. It also removes the excess NO_3 that is leached below the root zone. Water leaches excess nitrates from the rooting zone to the subsurface anoxic reducing zone where denitrification occurs. Denitrification can be both microbial and chemical, but the microbial process dominates in most soils through a stepwise reduction of NO_3 to N_2.

Soil atmosphere O_2 concentration, which is regulated by soil water content interacting with soil texture and microbial respiration, is the main controller of the denitrification process. The oxygen consumption rate depends on the amount of easily degradable organic carbon compounds and the interplay of water and carbon that is responsible for developing the reduced oxic conditions in soil, which regulates the amount of total denitrification. Under certain conditions, related to nutrient input relative to crop demand and soil water status , nitrogen loss from denitrification can be limited. Do these conditions exist in the Yakima basin? Or, is nitrate accumulation caused because the rate of input exceeds the rate of denitrification. That is, are inputs are a legacy of contamination from past agricultural practices and that nitrate load has overwhelming the capacity for denitrification by natural means.

It would seem like this would be an easy question to answer if agricultural inputs of nitrates were high in the past (50 years ago) and there were no new inputs of nitrates since then. This seems like an impossible position to defend given the intensity of agriculture today compared to 50 years ago. So, nitrogen inputs higher or lower today than they were 50 years ago? Regardless, I don't think nitrates fit the strict definition of legacy contaminants because they are reduced naturally by the denitrification process. They may, however, be the result of ongoing contamination that is a legacy of changes in agricultural practices that occurred in the past. Unless it can be shown that there are no new inputs of nitrates and the natural denitrification process is not occurring because of factors related to the availability of easily degradable organic C or an alteration of the reduced oxic conditions of the subsurface zone where denitrification occurs the nitrate contamination we see today has to be viewed as a single contamination event that has lasted 50 years. In other words, this has to be distinguished from a contaminant that appeared 50 years ago and persists until today, which would place nitrates in the same category of other persistent, bioaccumulative contaminants like mercury, lead and DDT.

All the best,

Dan